"At one time the organic basis for a patient's symptoms could be established only at the post-mortem examination. The trend in modern medicine and surgery, however, is to study the living patient more and more intensely in order to understand not only his symptoms but the way in which normal physiological and biochemical processes have broken down, for disease is coming increasingly to be thought of as a disordered physiology in which the compensatory mechanisms have been overstrained."

Chapters II to VIII describe the essential present-day information concerning the basic chemical structure of the body: Carbohydrates, lipids, the proteins, nucleic acids and nucleoproteins, enzymes, water, and minerals. Chapters IX to XXI, XXV, and XXXII to XXXIV, inclusive are devoted to foods and vitamins, transport, digestion, absorption and metabolism of foods and respiration and biological oxidations and reductions. The remaining portions of the book are devoted to circulation, excretion, locomotion, sensation and reflex centers, functions of different parts of the central and autonomic nervous systems, the endocrine glands, reproduction, heredity, growth and senility. The text is profusely illustrated with tables, charts, drawings, photographs and photomicrographs. It is remarkable how much important information is to be found in this relatively small volume and how successfully the material has been organized and presented, not only for teaching those who approach the subject for the first time, but also for those who would use the book for reference. It is well indexed.

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PHARMACOLOGY. By Michael G. Mulinos, M.D., A.B., A.M., Ph.D., Associate Professor of Physiology and Pharmacology, New York Medical College. Oxford University Press, New York, 1951. 484 pages. $5.00.

This book is unique in the field of pharmacology in that it is written in outline form rather than as straight textual matter. This no doubt makes for ease in finding the particular information for which the busy practitioner is looking, but for the medical student approaching the subject for the first time it seems scarcely good pedagogy. The author also makes the same mistake so many other textbook writers make, especially those writing in the field of pharmacology; he has introduced the subject by giving a long list of definitions, dosage rules, principles of administration, general principles of pharmacology and classification of drugs before the student has learned any of the properties of drugs which would make it possible for him to comprehend the principles. Such an approach requires rote memory on the part of the student. For those who approve this style of teaching this is the best "small" book in the American market. There are however actually 466 pages of text outline and tabular material, and the book is therefore small only in comparison with such encyclopedic works as Sollmann's "Manual of Pharmacology" or Goodman and Gillman's "Pharmacological Basis of Therapeutics."

The reviewer has read this book with mixed admiration and disappointment. There are many more practical points concerning uses of drugs than are found in the larger treatises but it is difficult to find an analytical or critical evaluation of a drug. The book is purely descriptive. There are excellent tables for orientation and comparison of drugs, and if one is looking for a direct statement of site and manner of action, he can quickly find it, but one looks in vain for experimental or clinical evidence for the statements. There is a good selection of toxicological effects but little attention to site and manner of action of poisons.

The author gives more detail for the administration of drugs than is usually found in a textbook of pharmacology but important factors governing administration, such as fate and excretion of drugs, are given inadequate treatment. For example, there is no discussion of carinamide in relation to the excretion of penicillin, and Brodie's excellent work on the metabolism of acetanilid and similar drugs is overlooked.

Unfortunately, the book was completed before the appearance of the latest edition of the United States Pharmacopeia (U.S.P. XIV) so that new names and official status of many drugs are not included. There has been a failure to bring the bibliography up to date. There are many statements which are not acceptable to most pharmacologists and critical and experienced clinicians, such as that barium chloride is useful in treatment of the Stokes-Adams syndrome, that cyclopropane induces adequate muscular relaxation, and the incomplete statement that the active principles of digitalis "are glycosides, made up of an aglycone possessing the cardiac activity, and a carbohydrate portion called digitoxose." However, the author is to be commended for the statement that "there is no proof that the purified principles of digitalis are superior to the powdered leaf or its tincture, except in the rate of absorption or the route of administration."

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HEART DISEASE—ITS DIAGNOSIS AND TREATMENT. By Emanuel Goldberger, B.S., M.D., Associate Attending Physician, Montefiore Hospital, New York; Lecturer in Medicine, Columbia University. 90 Illustrations. Lea & Febiger, Philadelphia. 1951. 651 pages. $10.00.

This is a well written and excellently illustrated book on diseases of the heart and great vessels. The diagrams of roentgen-ray films of the heart in the various clinical states are especially well executed for teaching the patterns of chamber enlargements. As would be expected of this author, electrocardiography is briefly but well presented for each of the clinical states discussed. It is well indexed with an adequate but not massive bibliography including a careful choice of key articles recently published.

The remarkable characteristic of this work is the inclusion of a mass of information with unusual clarity and brevity. There is an avoidance of repetition by cross-references. Brevity has the advantage of making readily accessible the outstanding diagnostic and clinical features of each disease entity with its basic structural and functional abnormalities. However, such restriction of space limits description of the variations that are often observed in many of the clinical conditions covered, most notably rheumatic fever, rheumatic heart disease and myocardial infarction.

The organization of the book separates clinical syndromes from the disease entities, which is generally satisfactory, but results in discussions of angina pectoris and myocardial infarction without developing the concept of borderline states of coronary circulatory insufficiency.

There are excellent and well accepted plans of therapy, including anticoagulant drugs, ACTH, cortisone, quinidine and pronestyl, as applied by the author, which should furnish the practitioner many tools for treatment of cardiac patients. As would be expected, when an author draws liberally from personal experience, there will be conflict between his and other opinions as to the values and dangers of some of these procedures; for example, the uniform use of dicumarol or tromexan in treatment of myocardial infarction. These drugs may not be worth using on mild cases of myocardial infarction, especially where trained technicians are not available.

The book should serve as a valuable source of ready reference for all medical practitioners in the broad field of cardiology, excluding peripheral vascular diseases, and a guide to explore in greater detail those subjects which are only briefly included. Although the author emphasizes the practical aspects of cardiology, such as bedside diagnostic methods and the relation of surgery and pregnancy to the cardiac patient, he also presents briefly the most recent technical developments as exemplified by cardiac catheterization and electrokymography.